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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jari Eikkula

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EXAMINER

MAIS, MARK A

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

08/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/835,821

Applicant(s)

EIKKULA, JARI

Examiner

Mark A. Mais

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18, 24-28, 30-32, 35, 36 and 38-43 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 8, 11-14, 21, 22, 29, 33, 34, 37 and 44-51 is/are rejected.
- 7) ☐ Claim(s) 5, 6, 9, 10, 19, 20 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 3, 2007 has been entered.

Specification

2. Applicant's amendment to the Specification is approved and will be entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. H.323 is an IP-related signaling protocol. Therefore, it cannot depend from claim 1, which specifically claims a non-IP telephony signaling protocol.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 7-8, 13, 21, 22, 29, 33, 34, and 44-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoakum et al. (USP 6,735,621).

7. With regard to claims 1 and 13, Yoakum et al. discloses a method *comprising*:

adding *non-IP telephony signaling protocol* service reference information to an IP telephony signaling message [adds SS7 signaling into SIP (Abstract; SS7 is a non-IP

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signaling protocol); the IP Network 108 uses SIP, and it is inherent that a network using SIP must be able to add/separate/use the SS7 service reference information delivered in the SIP messages]

and sending an IP telephony signaling protocol message to a network node [An SIP message is sent from the IP Network 108 to the SCG 1, see Abstract].

8. With regard to claim 2, Yoakum et al. discloses that the IP telephony signaling protocol message is a message initiating a session [SIP INVITE, col. 2, lines 14-24].

9. With regard to claim 3, Yoakum et al. discloses routing a call to the network node via an entry point [Fig. 1, Number Server 107 is an entry point between Network 1 and the IP Network, col. 4, lines 60-63] and performing said adding in the entry point [the number server 107 can proxy messages to other SIP nodes and receives/converts all called party addresses to numerical values prior to sending them back to Network 1, col. 5, lines 6-12].

10. With regard to claim 4, Yoakum et al. discloses that the address of the entry point is added as service reference information to the IP telephony signaling protocol message [the called number (address) is replaced with the new address based on the proxy results for the TCAP-to-SIP and SIP-to-TCAP replacements, col. 5, lines 3-12].

11. With regard to claim 7, Yoakum et al. discloses that the IP telephony signaling protocol message is a response message acknowledging a message invoking a session

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[upon call data being received at the entry point, an SIP INVITE message is encoded and then sent back, col. 6, lines 29-55].

12. With regard to claim 8, Yoakum et al. discloses receiving an IP telephony signaling protocol message in a network node serving a called subscriber and adding at least the address of the network node serving a called subscriber as service reference information to the response message **[the called number (address) is replaced with the new address based on the proxy results for the TCAP-to-SIP and SIP-to-TCAP replacements, col. 5, lines 3-12].**

13. With regard to claim 21, Yoakum et al. discloses a
user equipment **[Fig. 1, interpreted as user equipment in IP Network 108], a first network node [Fig. 1, IP Network 108], a second network node [Fig. 1, Service Control Gateway (SCG 1), col. 2, lines 64-66]**

wherein

the first network node **[Fig. 1, IP Network 108]** is arranged to add *non-IP telephony signaling protocol* service reference information relating to a call made to the user equipment to an IP telephony signaling protocol **[adds SS7 signaling into SIP (Abstract; SS7 is a non-IP signaling protocol); the IP Network 108 uses SIP, and it is inherent that a network using SIP must be able to add/separate/use the SS7 service reference information delivered in the SIP messages]**

message to the second network node **[Fig. 1, Service Control Gateway (SCG 1), col. 2, lines 64-66]; and**

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the second network node is arranged to separate the service reference information from the IP telephony signaling protocol message [Fig. 1, SCG 101 stores and adds information in TCAP messages into SIP messages from Network 1, col. 3, lines 16-25; and vice-versa when it receives messages bound for Network 1 from the IP Network, col. 2, lines 36-40].

14. With regard to claim 22, Yoakum et al. discloses that the address of the first node is added as a service reference information to the IP telephony signaling protocol message [Fig. 1, SCG 101 stores and adds information in TCAP messages into SIP messages from Network 1, col. 3, lines 16-25; and vice-versa when it receives messages bound for Network 1 from the IP Network, col. 2, lines 36-40; moreover, this is a function performed in SIP when creating SIP messages; e.g. SIP INVITE, col. 2, lines 14-24].

15. With regard to claim 29, Yoakum et al. discloses a

user equipment [Fig. 1, interpreted as user equipment in IP Network 108], a first network node [Fig. 1, IP Network 108], a second network node [Fig. 1, Service Control Gateway (SCG 1), col. 2, lines 64-66]

wherein the first network node [Fig. 1, IP Network 108] is arranged to add first service reference information relating to a call made to the user equipment to an IP telephony signaling protocol initiating a session [the IP Network 108 uses SIP, and it is inherent that the IP network must be able to add/separate/use the service reference information delivered in the SIP messages; this function is performed in SIP when creating SIP INVITE; e.g. SIP INVITE, col. 2, lines 14-24], to send the IP telephony

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signaling protocol message initiating a message to the second network node [Fig. 1, the SIP message is sent from the IP network to Network 1 via SCG 1]; to receive a response message acknowledging the IP telephony signaling protocol message initiating a session and to separate second service reference information relating to the call from the SIP response message [adds SS7 signaling into SIP (Abstract; SS7 is a non-IP signaling protocol); the IP Network 108 uses SIP, and it is inherent that a network using SIP must be able to add/separate/use the SS7 service reference information delivered in the SIP messages]; and

the second network node [Fig. 1, Service Control Gateway (SCG 1), col. 2, lines 64-66]; is arranged to separate the first service reference information from the IP telephony signaling protocol message initiating a session and to add the second reference information to the response message and to send the response message to the first network node [Fig. 1, SCG 101 stores and adds information in TCAP messages into SIP messages from Network 1, col. 3, lines 16-25; and vice-versa when it receives messages bound for Network 1 from the IP Network, col. 2, lines 36-40; moreover, this is a function performed in SIP when creating SIP messages; e.g. SIP INVITE, col. 2, lines 14-24; when call data is received at the entry point, an SIP INVITE message is encoded and then sent back, col. 6, lines 29-55; thus, there is a back and forth of adding addresses and separating reference information between the two network nodes, e.g., the called number (address) is replaced with the new address based on the proxy results for the TCAP-to-SIP and SIP-to-TCAP replacements, col. 5, lines 3-12] wherein the first service reference information is non-IP telephony signaling protocol service information [see above].

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16. With regard to claims 33 and 34, Yoakum et al. discloses a network node [Fig. 1, IP Network 108] in a communications system providing IP telephony, wherein the network node comprises means for adding/separating *non-IP telephony signaling protocol* service reference information to an IP telephony signaling message [**adds SS7 signaling into SIP (Abstract; SS7 is a non-IP signaling protocol); the IP Network 108 uses SIP, and it is inherent that a network using SIP must be able to add/separate/use the SS7 service reference information delivered in the SIP messages].**

17. With regard to claims 44-45 and 48-49, Yoakum et al. discloses a processor configured to add/separate non-IP telephony signaling protocol service reference information to an IP telephony signaling protocol message [**adds SS7 signaling into SIP (Abstract; SS7 is a non-IP signaling protocol); the IP Network 108 uses SIP, and it is inherent that a network using SIP must be able to add/separate/use the SS7 service reference information delivered in the SIP messages; it is inherent that a processor and/or computer program performs this function].**

18. With regard to claims 46-47 and 50-51, Yoakum et al. discloses a processor configured to generate/separate a charging identifier to be used in billing as charging correlation information from an SIP message [**Yoakum et al. discloses Intelligent Network Application Protocol (INAP) which provides the non-IP billing/charging identifier for inter-network compatibility between SS7 and SIP, col. 1, line 65 to col.**

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2, line 5].

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 11, 12, 14, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoakum et al.

21. With regard to claims 11, 12, and 14, Yoakum et al. discloses adding SS7 signaling into SIP [**Abstract; SS7 is a non-IP signaling protocol**]. The IP Network 108 uses SIP, and it is inherent that a network using SIP must be able to add/separate/use the SS7 service reference information delivered in the SIP messages. Yoakum et al. does not specifically disclose that the telephony signaling protocol is OSA, Parlay API, or H.323. The examiner takes Official Notice that H.323 is an IP-related signaling protocol. As such, it cannot depend from claim 1, which claims a non-IP telephony signaling protocol. More importantly, such signaling protocols are well known to those of ordinary skill in the art. Moreover, adding service reference information to each of these well-known telephony standards is the *intent* of these protocols. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have added service reference

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information to not only SIP—but to OSA, Parlay API, or H.323—because service protocols (such as SIP) provide call control that is used to establish, modify, and terminate multimedia sessions (calls) and provide call setup, modification, and termination functions [col. 2, lines 11-16].

22. With regard to claim 37, Yoakum et al. does not specifically disclose that the network node comprises a call state control function. However, such functionality is well known in the art. SIP provides call control functionalities used to establish, modify, and terminate multimedia sessions (calls) and provide call setup, modification, and termination functions [col. 2, lines 11-16]. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided for a network node with call control state functionalities because gateways between networks provide the means to call control such as set-up and teardown (as well as billing).

Allowable Subject Matter

23. Claims 15-18, 24-28, 30-32, 35, 36, and 38-43 are allowed.

24. Claims 5, 6, 9, 10, 19, 20, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Response to Arguments

25. Applicant's arguments filed August 3, 2007 have been fully considered but they are not persuasive.

26. With respect to claim 1, Applicant argues that Yoakum et al. fails to disclose adding non-IP telephony signaling protocol service reference information to an IP signaling protocol message (SIP) [**Applicant's Amendment dated August 3, 2007, page 15, paragraph 2**]. With respect to claims 21, 29, 33, and 34, Applicant makes a similar argument [**Applicant's Amendment dated August 3, 2007, page 15, paragraphs 3-6**]. The examiner respectfully disagrees.

27. As noted for the rejection of claim 1, for example, Yoakum et al. discloses adding SS7 signaling into SIP [**Abstract; SS7 is a non-IP signaling protocol**]. The IP Network 108 uses SIP, and it is inherent that a network using SIP must be able to add/separate/use the SS7 service reference information delivered in the SIP messages.

28. With respect to claims 11, 12, and 14, Applicant argues that telephony signaling protocols such as OSA, Parlay API, or H.323, are not well known in the art [**Applicant's Amendment dated August 3, 2007, page 16, paragraphs 3-4**]. The examiner respectfully disagrees.

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29. First, the examiner interprets H.323 as an IP-related telephony signaling protocol. Therefore, it cannot depend from claim 1, which specifically claims a non-IP telephony signaling protocol. Second, as noted in the rejection of claims 11, 12, and 14, Yoakum et al. discloses adding SS7 signaling into SIP [**Abstract; SS7 is a non-IP signaling protocol**]. The IP Network 108 uses SIP, and it is inherent that a network using SIP must be able to add/separate/use the SS7 service reference information delivered in the SIP messages. Such signaling protocols are well known to those of ordinary skill in the art. Moreover, adding service reference information to each of these well-known telephony standards is the *intent* of these protocols. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have added service reference information to not only SIP—but to OSA, Parlay API, or H.323—because service protocols (such as SIP) provide call control that is used to establish, modify, and terminate multimedia sessions (calls) and provide call setup, modification, and termination functions [**col. 2, lines 11-16**].

30. With respect to claims 11, 12, 14, and 37, Applicant further argues that the analysis [with regard to the reason elements are combined] should be made explicit [**Applicant's Amendment dated August 3, 2007, page 17, paragraph 1**]. Applicant asserts, apparently, that the examiner has only made an obviousness rejection on general common knowledge and common sense, which do not substitute for the authority required by law [**Applicant's Amendment dated August 3, 2007, page 17, paragraph 1**]. Applicant cites to *In re Zurko* and *In re Sang Su Lee* in asserting that the examiner must provide the proper motivation to modify Yoakum et al. to include, apparently, any other telephony

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signaling protocol other than SIP or SS7 [**Applicant's Amendment dated August 3, 2007, page 18, paragraph 1 to page 19, paragraph 5**]. The examiner respectfully disagrees.

31. The examiner has made a reasonable rejection based on the broadest reasonable interpretation consistent with the specification. The examiner asserts that such analysis has been made explicit [**see rejection above**]. Voice over IP (VoIP) networks all must use some type of signaling. But, not all VoIP networks use the *same* signaling. To achieve translations between different VoIP networks, conversion (proxy) gateways often performs translations between different signaling protocols such as H.323/H.450, SIP, MAGACO, etc.—specifically, there are several examples of other VoIP signaling protocol translations [**e.g., Yoakum et al. performs TCAP-to-SIP translations; Li et al. (USP 6,961,332) performs ISDN-to-H323 translations, and both Ma et al.'s (USPs 6,868,090 and 7,136, 373) perform TCAP-to-H.323/H.450 translations**]. Moreover, there are only a finite number of telephony signaling protocols (IP and non-IP) with which a person of ordinary skill has good reason to pursue the known options within his technical grasp to add service reference information from these protocols to SIP messages. If this leads to anticipated success, it is likely the product is not of innovation but of ordinary skill and common sense [**KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385 (CAFC 2007)**].

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Conclusion

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Mais whose telephone number is 572-272-3138.

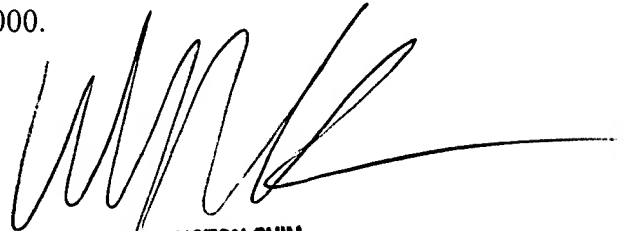
The examiner can normally be reached on M-Th 5am-4pm.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan F. Wing can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAM

August 9, 2007



WELLINGTON CHIN
PROSORY PATENT EXAMINER